

In the Claims

1-7 (cancelled)

8. (new) A method of filtering fluids, comprising the steps of:

supplying unfiltered material through an input to a plurality of stacked frame parts of filtrate plates and filter frames, the filter frames bordering on filter spaces;

discharging filtrate through an output;

forming filtrate cakes in the filter spaces;

sealing each filter space on a side thereof facing a next frame part by a first laminar filter and on an opposite side thereof by a second filter medium;

feeding a washing fluid sequentially through each set of the filter mediums, the filter cakes and the laminar filters; and

conveying the washing fluid from the laminar filters to the output.

9. (new) A method according to claim 8 wherein

the laminar filters are deep-bed filter mediums; and

the second filter mediums are formed by one of filter cloths and deep-bed filter mediums.

10. (new) A method according to claim 8 wherein

a compressive force is applied to each second filter medium, pressing the respective filter cake in a direction of the respective first laminar filter.

11. (new) A method according to claim 10 wherein

each compressive force is applied to the respective second filter medium by a membrane subjected to a pressurized medium in the form of one of a pressurized gas and a pressurized liquid, each membrane being a component of a membrane plate formed as another frame part.

12. (new) A method according to claim 8 wherein

each first laminar filter and second filter medium are clamped between the respective frame parts formed as plates; and

the unfiltered material and the filtrate is conveyed through channels in the plates to and from the input and output.

13. (new) A method according to claim 12 wherein

the washing fluid is supplied and drained through channels in the frame parts.

14. (new) A device for filtering fluids, comprising:

an input for supplying unfiltered material;

an output for discharging filtrate;

a plurality of stackable frame parts including filtrate plates and filter frames between said input and said output, each said filter frame bordering on a filtrate space for accommodating and forming a filter cake;

first laminar filters being mounted on the respective frame parts, facing others of said frame parts and sealing said filtrate spaces;

second filter mediums bordering said filtrate spaces on sides thereof opposite said first laminar filters; and

channel means for conveying a washing fluid sequentially through each set of said second filter mediums, said filtrate spaces and said first laminar filters, and out said output.

15. (new) A device according to claim 14 wherein

said first laminar filters are deep-bed filter mediums; and

said second filter mediums are one of filter cloths and deep-bed filter mediums.

16. (new) A device according to claim 14 wherein

said frame parts comprise compression means for applying compressive forces to each said filtrate space from the respective second filter medium toward the respective first laminar filter.

17. (new) A device according to claim 14 wherein

said compression means comprise membrane plates being selected ones of said frame parts and having membranes exposed to pressurized medium in the form of one of pressurized gas and pressurized liquid.

18. (new) A device according to claim 14 wherein

said first laminar filters and said second filter mediums are clamped between respective frame parts formed as plates; and

channels extend through said plates for conveying unfiltered material and filtrate through said parts and to form said input and said output.

19. (new) A device according to claim 14 wherein

said channel means comprise channels extending through said frame parts.